

REMARKS

In accordance with the foregoing, FIGs. 1-9 have been corrected by submitting replacement drawing sheets, the specification has been amended, and claims 1-12 have been amended. New claim 13 has been added. Claims 1-13 are pending and under consideration.

The drawing sheets submitted herewith include changes to FIGs. 1-9. The sheets containing FIGs. 1-9 replace the original sheets including FIGs. 1-9. Corrected FIGs. 1, 2, 3, and 7, are each designated by the legend "conventional system," and corrected FIGs. 4, 5, 6, 8, and 9 are each designated by the legend "conventional method". The addition of these legends is the only correction to the drawings. No changes were made to the figures themselves. Approval of these changes to the Drawings is respectfully requested.

The Examiner has objected to "page 87" of the specification due to Figure 5 being mislabeled. The specification does not include a page 87. Applicants believe that the Examiner is referring to page 8 and have amended the third paragraph on page 8 to replace "Fig. 15" with "Fig. 5." Applicants respectfully request that the Examiner inform Applicants if page 8 is not the page to which the Examiner intended to refer in the Office Action. Applicants respectfully request that all objections be withdrawn.

On page 3 of the Office Action, the Examiner objected to claims 1-12 under 35 U.S.C. § 101 due to the claims allegedly being directed to non-statutory subject matter. In response to the Objection, Applicants have amended independent claim 1 to include the recitation of, "executing on a computer," which is similar to the Examiner's proposed claim amendment. Applicants have amended claim 9 to include the recitation of, "executing on a computer and stored on a computer readable medium," as suggested by the Examiner. Applicants respectfully request that the rejection of claims 1-12 under 35 U.S.C. § 101 be withdrawn, as the claims are directed to statutory subject matter. In particular, claim 1 recites technology, and claim 9 is directed to a computer readable medium including a method to be executed by a computer.

On page 4 of the Office Action, claims 1-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 5,640,588 (Vegesna) in view of the conventional systems and methods described in the specification of the present invention (e.g., Figure 5 and accompanying text). The application includes only 12 claims. Thus, Applicants will only address the 12 claims of the application and the additional claim 13 added herein by Applicants.

According to Vegesna, it is directed to an apparatus and method for scheduling a sequence of instructions for achieving multiple executions with a Central Processing Unit (CPU).

Each instruction is classified according to an execution resource of the CPU that executes the instruction. See column 3, lines 11-35.

The conventional system described in the specification of the current invention is directed to an algorithm to verify an arrangement of basic fixed-length Very Long Instruction Word (VLIW) instructions. The conventional system includes actual instruction slots that are used to store the basic instructions. See Specification, page 2, lines 36-27 and FIG. 1.

According to the present invention, it is directed to a method to verify an arrangement of basic VLIW instructions for language processing systems used on processors designed by variable length VLIW architecture. The method of the present invention includes determining whether a basic instruction can be assigned to a logical instruction slot. According to the present invention, a logical instruction slot is a virtual instruction slot which corresponds to a particular functional unit and can be used to store variable length VLIWs. See Specification, page 28, lines 6-12.

The Examiner admitted in the Office Action that Vegesna does not teach a logical instruction slot. It follows that Vegesna does not teach or suggest, "determining whether said basic instruction can be assigned to a logical instruction slot." Applicants respectfully submit that unlike the present invention, the conventional method and system described in the application also does not teach or suggest, "determining whether said basic instruction can be assigned to a logical instruction slot. . . ." Although the conventional method described in the specification includes storing instructions into instruction slots, the instruction slots in the conventional system are actual registers, not logical instruction slots. As shown in FIG. 3, for example, each register can include a VLIW. Therefore, independent claims 1 and 9 are patentable over the conventional method, as the conventional method does not teach, "determining whether said basic instruction can be assigned to a logical instruction slot."

As claims 2-8 and 10-12 depend from independent claims 1 and 9, respectively, these claims are also patentable over Vegesna in view of the conventional system and method described in the specification, as neither Vegesna nor the conventional system and method, taken alone or in combination, teaches or suggests the elements of the present invention.

Applicants respectfully submit that claim 13 is patentable over Vegesna, as Vegesna does not teach or suggest, "arranging variable-length instructions to be executed in an order; and verifying an arrangement of the variable-length instructions." Applicants respectfully request that all rejections be withdrawn.

There being no further outstanding objections or rejections, it is submitted that the

Serial No. 10/053,707

application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 1 June 05

By: 

Reginald D. Lucas
Registration No. 46,883

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501

AMENDMENTS TO THE DRAWINGS:

Please replace the drawing sheets including FIGs. 1-9 with the drawing replacement sheets submitted herewith, which also include FIGs. 1-9.